

REMARKS – General

Power of Attorney:

Applicant has retained new counsel in the prosecution of this application. A revocation and power of attorney accompanies this amendment.

Time for Response:

Applicant's agent notes that the shortened statutory time for response set forth in the Office Action (OA) is 2 months. Applicant has advised Applicant's Attorney that, per a telephone conversation with the Examiner, that this shortened statutory time is an inadvertent typographical error and should be 3 months. Accordingly, Applicant includes herein a two-month extension of time request.

Amendments to the Specification:

The specification has been amended above to correct minor typographical errors.

Rejections under 35 USC §102:

The OA rejects claims 1-7, 10, 13, and 15 as being anticipated by Sasaki, Japanese Laid Open Patent Application 7303209. (Applicant notes that per an English translation of this application obtained by Applicant, it appears that the inventor is named Shuichi Murakami. Due to this confusion, the application will be referred to herein as the “209 Application.”) Specifically, looking at claim 1, the OA submits that the ‘209 Application teaches detecting mouse movement of a user at paragraph [0008]; obtaining at least one metric of mouse movement information characterizing the user at paragraph [0008]; comparing the metric against a database at paragraph [0008]; and authenticating a user at paragraph [0008].

Applicant has amended claim 1 to recite detecting “...mouse micromotion data of a user by gathering a plurality of samples per mouse click ...” Support for Applicant's amendment is found in Applicant's published application at paragraph [0077]-[0078]. (“...mouse micromotions according to the present invention are an order of magnitude smaller than the typical mouse clicks that are of interest to conventional hardware and

software devices. For mouse motions in the order of seconds, the micromotions are in the 10.sup.th or 100.sup.th of the seconds... A microsensor 171 captures or gathers data relating the movement of a mouse.”)

Applicant respectfully submits that the ‘209 Application fails to teach a system for detecting mouse micromotion data by gathering multiple samples per click. To the contrary, the ‘209 Application expressly teaches away from Applicant’s invention by teaching taking a single sample per click. Throughout the ‘209 Application, a single x,y, and t coordinate is sampled for each mouse click. This is particularly evident in FIG. 3 of the ‘209 Application, where there is a one to one correspondence of a mouse click to each x,y, and t coordinate. Further, individual characteristics are determined in the ‘209 Application by single click, single coordinate calculations. For example, paragraph [0013] teaches comparison of coordinates taken from two users, with the coordinates being based upon two data points taken from two clicks, one from each user, respectively. Paragraph [0013], the ‘209 Application states:

FIG. 2 explains the principles of the personal mannerisms (i.e., the mouse movement locus¹ pattern) that characterize users and that are used by the present invention. The upper and lower parts are examples that depict the mouse button click timing pattern and the mouse movement locus pattern for the cases wherein the mouse is operated by person A and person B, respectively. A prerequisite of the mouse operation is that both person A and person B click the same icons on the screen. Upon comparing a movement locus 50 of the mouse 10 by person A and a movement locus 51 of the mouse by person B, it can be clearly understood that they differ in their personal mannerisms. The movement locus can be parameterized (converted to data) by dividing the click button press interval into X and Y coordinates. The differences in the mannerisms of person A and person B are clear when comparing an X coordinate 60 and a Y coordinate 65 of person A with an X coordinate 61 and a Y coordinate 66 of person B. In addition, it can also be seen that the intervals during which the click button of the mouse 10 is pressed are different, i.e., (t1) 70 for person A and (t'1) 71 for person B. The present invention makes use of these differences in personal mannerisms.

¹ Applicant’s technical translator notes that this Japanese word (kiseki) can be translated into English as any of “locus”, “trajectory”, or “track”. Applicants present “locus” here because the meaning of “position, point, or place” is consistent with the example set forth in italics.

Further, EQ. 3 of the ‘209 Application compares the difference between a single coordinate sampled from a single click of a particular user with an average coordinate associated with a click on a specific target of the user interface. (Paragraph [0013] states, “A prerequisite of the mouse operation is that both person A and person B click the same icons on the screen.”) Throughout the ‘209 Application, a single coordinate pair is sampled from a single click, which is in contrast to Applicant's amended claims 1 and 7 where multiple samples are taken per click. As the ‘209 Application fails to teach taking multiple samples per click, Applicant respectfully requests reconsideration of the rejection in light of the amendment and these comments.

Claim 7 has been amended in similar form. Applicant respectfully requests reconsideration of the rejections to claim 7 and the claims depending therefrom per the comments above.

Claim Rejections under 35 USC §103:

The OA rejects claims 8 and 9 are rejected as being unpatentable over the ‘209 Application in view of Federova, US Pat. App. Publication No. 2004/0172564. Applicant respectfully submits that neither the ‘209 Application nor Federova teaches the detection of mouse micromotion data by gathering a plurality of samples per mouse click as is claimed by Applicant in amended claims 1 and 7. Applicant respectfully requests reconsideration of the rejection.

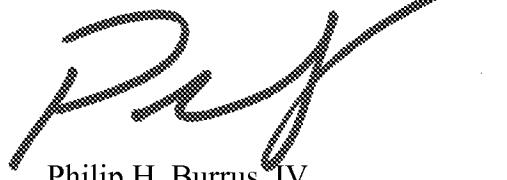
The OA rejects claim 12 over the ‘209 Application in view of Allen, US Pat. App. Publication No. 2003/0042298. Applicant respectfully submits that neither the ‘209 Application nor Allen teaches the detection of mouse micromotion data by gathering a plurality of samples per mouse click as is claimed by Applicant in amended claims 1 and 7. Applicant respectfully requests reconsideration of the rejection.

The OA rejects claims 11 and 14 as being unpatentable over the ‘209 Application in view of Gallagher, US Pat. No. 7,031,939. Applicant respectfully submits that neither the ‘209 Application nor Gallagher teaches the detection of mouse micromotion data by gathering a plurality of samples per mouse click as is claimed by Applicant in amended claims 1 and 7. Applicant respectfully requests reconsideration of the rejection.

CONCLUSION

For the above reasons, Applicants believe the specification and claims are now in proper form, and that the claims all define patentably over the prior art. Applicants believe this application is now in condition for allowance, for which they respectfully submit.

Respectfully submitted,



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